PROPOSED AMENDMENTS TO THE CLAIMS

1. (Currently Amended) Process for assembly of aluminum alloy plates comprising fluxless brazing of the aluminum alloy plates to form an assembly, under a controlled atmosphere consisting essentially of nitrogen and/or argon at a temperature of between 580°C and 620°C, and rapid cooling, and in which at least one of the aluminum alloy plates consists essentially of:

(a) a core alloy with composition (% by weight):

Si 0.3-1.0; Fe<1.0; Cu 0.3-1.0; Mn 0.3-2.0; Mg 0.3-3.0; Zn<6.0; Ti<0.1; Zr<0.3; Cr<0.3; Ni<2.0; Co<2.0; Bi<0.5; Y<0.5; other elements <0.05 each and <0.15 total, remainder aluminum, and

(b) an aluminum brazing alloy coated as a single layer on at least one face of the core alloy, the aluminum brazing alloy including 4% to 15% of silicon and 0.01% to 0.5% of at least one element selected from the group consisting of Ag, Be, Bi, Ce, La, Pb, Pd, Sb, Y or mischmetal, the aluminum brazing alloy being free of sodium.

Deleted: having no intentional addition

2. (Previously Presented) Process according to claim 1, wherein the copper content of the core alloy is between 0.35% and 1%.

3. (Previously Presented) Process according to claim 1, wherein the manganese content of the core alloy is between 0.3% and 0.7%.

4. (Previously Presented) Process according to claim 1, wherein the magnesium content of the core alloy is between 0.35% and 0.7%.

5. (Previously Presented) Process according to claim 1, wherein the zinc content of the core alloy is less than 0.2%.

6. (Previously Presented) Process according to claim 1, wherein the bismuth content of the core alloy is between 0.05% and 0.5%.

7. (Previously Presented) Process according to claim 1, wherein the yttrium content of the core alloy is between 0.01% and 0.5%.

8. (Previously Presented) Process according to claim 1, wherein the composition of the core alloy is (% by weight):

Si 0.3-1.0; Fe<0.5; Cu 0.35-1.0; Mn 0.3-0.7; Mg 0.35-0.7; Zn<0.2; Ti<0.1; Zr<0.3; Cr<0.3; Ni<1.0; Co<1.0; Bi<0.5; Y<0.5; other elements <0.05 each and <0.15 total, remainder aluminum.

9. (Previously Presented) Process according to claim 1, wherein the brazing alloy is cladded onto the core alloy by co-rolling.

10. (Previously Presented) Process according to claim 1, wherein the brazing alloy coating is composed of particles.

11. (Previously Presented) Process according to claim 1, wherein the process is used for manufacturing of heat exchangers and that aging is conducted in hot parts during operation of exchangers.

12. (Previously Presented) Process according to claim 1, comprising aging at a temperature of between 80°C and 250°C after rapid cooling.

13. (Previously Presented) Process according to claim 10, wherein the particles are coated by a polymer resin.

14. (Currently Amended) A process for brazing one or more aluminum alloy plates comprising:

(a) coating the one or more aluminum alloy plates on at least one face with a single layer consisting of a cladding alloy comprising between 4% to 15% by weight silicon and 0.01% to 0.5% by weight of at least one element selected from the group consisting of Ag, Be, Bi, Ce, La, Pb, Pd, Sb, Y or mischmetal, the cladding alloy being free of sodium;

(b) subjecting the one or more aluminum alloy plates to fluxless brazing under a controlled atmosphere consisting essentially of nitrogen and/or argon at a temperature of between 580°C and 620°C, wherein at least one of the aluminum alloy plates subjected to fluxless brazing consists essentially of a core alloy comprising between 0.3% and 1.0% by weight silicon, between 0.3% and 3.0% by weight magnesium, between 0.3% and 2.0% by weight manganese, and between 0.3% and 1.0% by weight copper, with the cladding alloy coated as the single layer on at least one face of the core alloy, and

(c) rapidly cooling the one or more aluminum alloy plates.

15. (Previously Presented) The process according to claim 14 also comprising aging at a temperature of between 80°C and 250°C after rapid cooling.

16. (Previously Presented) The process according to claim 14, wherein the core alloy also comprises between 0.05% and 0.5% by weight bismuth and/or 0.01% to 0.5% by weight yttrium.

17. (Previously Presented) The process according to claim 14, wherein the core alloy comprises between 0.35% and 0.7% by weight magnesium.

18. (Previously Presented) The process according to claim 14, wherein the core alloy comprises (% by weight):

Si 0.3-1.0; Fe<0.5; Cu 0.35-1.0; Mn 0.3-0.7; Mg 0.35-0.7; Zn<0.2; Ti<0.1; Zr<0.3; Cr<0.3; Ni<1.0; Co<1.0; Bi<0.5; Y<0.5; other elements <0.05 each and <0.15 total, remainder aluminum.

19. (Cancelled)

20. (Cancelled)

21. (Previously Presented) Process according to claim 1, wherein when only one face of the core alloy is coated with the brazing alloy, an opposed face of the core alloy is uncoated.

22. (Previously Presented) Process according to claim 1, wherein when only one face of the core alloy is coated with the brazing alloy, an opposed face of the core alloy is coated with a sacrificial Al-Zn alloy.